www.osgeo.org



The open source eco-system

#SomeFood4Tought

Empower everyone with open source geospatial

FOSS4G Belgium – Brussels Dirk Frigne – 25 Oktober 2018 President OSGeo Europe

Welcome on the 4th FOSS4G Belgium Conference!

Some words of thanks ...

- All the volunteers
- The translators
- The FOSS4G team
- The presenters
- The sponsors













Setting the scene: what is an eco-system

Definition 1: (https://en.wikipedia.org/wiki/Ecosystem)

An ecosystem is a large community of living organisms (plants, animals and microbes) in a particular area. The living and physical components are linked together through nutrient cycles and energy flows. Ecosystems can be of any size, but usually they are in particular places.

Each ecosystem has its own community. An aquarium community, for example, can have small fishes and other organisms. A desert community may have cacti, small snakes, and scorpions. A pond community can have frogs, insects, snakes, and plants, and a forest community may have rabbits, foxes and pine trees. The species in a community are divided into populations according to the particular habitats and ecological niches in the ecosystem



Copyright (c) 2004 Richard Ling [GFDL (http://www.gnu.org/copyleft/fdl.html), CC-BY-SA-3.0 (http://creativecommons.org/licenses/ by-sa/3.0/) or CC BY-SA 2.5 (https:// creativecommons.org/licenses/by-sa/ 2.5)], from Wikimedia Commons



Setting the scene: what is an eco-system

Definition 2: (https://www.dictionary.com/browse/ecosystem)

[ek-oh-sis-tuh m, ee-koh-]

1. a system, or a group of interconnected elements, formed by the interaction of a community of organisms with their environment.

2. any system or network of interconnecting and interacting parts, as in a business: The success of Apple's ecosystem depends on hardware/software integration. Manufacturers, retailers, and customers are all part of the automotive industry's ecosystem.



https://pxhere.com/en/photo/918664 Copyright (c) CCO Public Domain Free for personal and commercial use No attribution required Learn more



Bad (?) example of an eco-system

Interesting Video: The apple Ecosystem Explained!

(https://www.youtube.com/watch?v=KB4_WIPE7vo)

- If you stick with one vendor: everything works smoothly
- Only interoperability between peers of the same family
- Stockholm Syndrome



https://pxhere.com/en/photo/918664 Copyright (c)

CC0 Public Domain Free for personal and commercial use No attribution required Learn more [[File:Hoysalesvara Temple walls with full of minute inscription.JPG|Hoysalesvara Temple walls with full of minute inscription]]



Bad (?) example of an eco-system

Interesting Video: The apple Ecosystem Explained!

(https://www.youtube.com/watch?v=KB4_WIPE7vo)

- If you stick with one vendor: everything works smoothly
- Only interoperability between peers of the same family
- Stockholm Syndrome



https://pxhere.com/en/photo/918664 Copyright (c) CC0 Public Domain Free for personal and commercial use No attribution required Learn more [[File:Hoysalesvara Temple walls with full of minute inscription.JPG|Hoysalesvara Temple walls with full of minute inscription]]



Bad (?) example of an eco-system

Massimo Barbieri Android vs. IOS CC BY-SA 2.0

Interesting Video: The apple Ecosystem Explained!

(https://www.youtube.com/watch?v=KB4_WIPE7vo)

- If you stick with one vendor: everything works smoothly
- Only interoperability between peers of the same family
- Stockholm Syndrome

One solution

- One communication protocol
- No diversity
- monoculture



https://pxhere.com/en/photo/918664 Copyright (c) CCO Public Domain Free for personal and commercial use No attribution required Learn more [[File:Hoysalesvara Temple walls with full of minute inscription.JPG|Hoysalesvara Temple walls with full of minute inscription]]







Setting the scene: what is an eco-system

Definition 3: (https://sciencing.com/10-examples-natural-ecosystem-7836.html)

An ecosystem is comprised of all the non-living elements and living species in a specific local environment. Components of most ecosystems include water, air, sunlight, soil, plants, microorganisms, insects and animals. ... Sizes of ecosystems vary; they could entail a small puddle or an enormous swath of desert. (Mar 13, 2018)

- Habitat (where organisms live)
- Living and non living things
- Need energy









OSGeo 12 Years old

Think global act local:

- World wide active
- Local representation
- OSGeo Belgium 3 Years
- OSGeo Europe 1 Year





What is OSGeo / What binds us together

- Remembering how we started?
 - It was about software development
 - Tribes of developers finding each-other
 - Start to share idea's, know how and events
 - (FOSS4G was born)



May The FOSS Be With You



What is OSGeo / What binds us together

- The rest is history
 - Start Local chapters to help with 'language' barriers
 - Start committees and share experience
 - Start with FOSS4G conferences
 - first Global, today Regional and Local Foss4G conferences
 - A lot of fun, a lot of energy,
 - Code sprints with a lot of (free?) beer and pizza
 - The opportunity to take local initiatives
 - The community grew



Aim of the last FOSS4G – Europe conference:

- The Conference aims to bring together the European FOSS4G community. It is not an academic neither a business event. It is a community event, to support face to face meetings and discussions, to foster interactions, to share knowledge and passion.
- It's all about the community
- Think global act local



OSGeo has grown into a large networked organisation

The Opte Project (https://commons.wikimedia.org/wiki/File:Internet_map_1024.jpg), "Internet map 1024", https://creativecommons.org/licenses/by/2.5/legalcode



OSGeo has grown into a large networked organisation

- Every year a big Conference world wide (NA, EU, Rest of world)
- More than 50 local chapters (almost every tree months a new one ...)
- Local Chapters on 'political level' (OSGEO Europe, OSGeo NA, more to come)
- Active in OGC
- Active in VN
- Set up partnerships
- New challenges appear (code of conduct, what binds us together, ...)



...

What binds us together?

- Open Source Software for Geo and Location
 - From several perspectives
 - Some of us are developers
 - Some of us are users
 - Some of us are students
 - Some of us are professors
 - Some of us work for a NGO
 - Some of us work for Government
 - Some of us are self deployed
 - Some of us are business owners
 - ...



What binds us together?

• FOSS4G is fun and gives energy





What binds us together?

- Open Source Software for Geo and Location
 - From several perspectives
 - Some of us are developers
 - Some of us are users
 - Some of us are students
 - Some of us are professors
 - Some of us work for a NGO
 - Some of us work for Government
 - Some of us are self deployed
 - Some of us are business owners
 - ...



The open source eco-system

What is (Free and) Open Source Software? (abbreviate: OSS or FOSS)



By Knase [CC BY 3.0 de (https://creativecommons.org/licenses/by/3.0/de/deed.en)], from Wikimedia Commons



FREE AS IN BEER





Open source software is free as in free speech, not as in free beer

Credits CC-BY-3.0: http://geek-and-poke.com/geekandpoke/2008/1/17/free-as-in-beer.html

• The freedom to run the program as you wish, for any purpose



- The freedom to run the program as you wish, for any purpose
- The freedom to study how the program works, and change it so it does your computing as you wish
- (Access to the source code is a precondition for this.)





- The freedom to run the program as you wish, for any purpose
- The freedom to study how the program works, and change it so it does your computing as you wish

(Access to the source code is a precondition for this.)

• The freedom to redistribute copies so you can help your neighbour



[1] Free Software Foundation (27 December 2016). "What is free software? The Free Software Definition". The GNU Project -- GNU.org. Retrieved 15 September 2018.

- The freedom to run the program as you wish, for any purpose
- The freedom to study how the program works, and change it so it does your computing as you wish

(Access to the source code is a precondition for this.)

- The freedom to redistribute copies so you can help your neighbour
- The freedom to distribute copies of your modified versions to others

(By doing this you can give the whole community a chance to benefit from your changes. Access to the source code is a precondition for this.)



And this is very important because Software is eating the world





Empower everyone with open source geospatial

- OSGeo is a not-for-profit software foundation
 - Provides projects financial, organizational and legal support
- Outreach and advocacy
 - Promoting global adoption of open source geospatial technology
 - Partnerships on open approach to standards, data and education.
- OSGeo is a volunteer driven
 - Passionate membership of individuals from around the world.



Back to our topic: an Open Source eco-system

Definition 3: (https://sciencing.com/10-examples-natural-ecosystem-7836.html)

An ecosystem is comprised of all the non-living elements and living species in a specific local environment. Components of most ecosystems include water, air, sunlight, soil, plants, microorganisms, insects and animals. ... Sizes of ecosystems vary; they could entail a small puddle or an enormous swath of desert. (Mar 13, 2018)

• Habitat (where organisms live)

=> the community

• Living and non living things

=> organisations, people, software, data, ...)

• Need energy

=> fun, money, respect, interaction, ...



Setting the scene

The Helix of Sustainability

- Sustainability •
- Diversity •
- Valuable •
- **2beProtected** •
- Circular economy

but also:

- Collaboration •
- Sharing •
- Trustworthy •
- Fun •
- Innovative •



Plants grow, making sugars, starches, oils. cellulose and other complex molecules from simple raw materials, mostly water, CO2 and sunshine.

fuel

In addition to harvesting food, people extract measuring and base materials for industry and as well as financial. commerce.

Manufacturers make wares, profitibility in environmental and social terms

The end-user reuses and repairs, only recycling after as long a useful life as possible.

At the end of its life the article decays, reducing large complex molecules to simple raw materials by the action of bacteria and fungi composting

Plants grow, making sugars, starches, oils, cellulose and other complex molecules from simple raw materials, mostly water, CO2 and sunshine.



Copyright image: Helix of sustainability-the carbon cycle of manufacturing - The New Zealand Institute for Crop and Food Research - Author: Design: Lynn Tucker, Graphic art: Astrid Erasmuson - 12th June 2008 - Creative Commons 3.0
















Great!! FOSS4G!!!





Obviously, only one of the many ...

- FOSS4G is great, but ...
- can't see the forest for the trees
 - How can we help with very simple problems
 - ex. available parking lots on a local website
 - which OSGeo software project to use for what function
 - What if we switch to open source
- How do we want to help (as a community)
 - In the original spirit where developers helped out, sharing information
 - If I put my time in it (because I need to solve it), you may as well use it
 - How can we scale this to the future
 - How can we support this



Why should I Bother? What's in for me?





CC0 SilviaP_Design https://pixabay.com/en/man-toon-club-stone-age-old-bart-2502243/

- We all want to move to a more transparent world
- Evolve to more collaboration
- We are convinced that (bio-) diversity is important
- We believe innovation will help sustainability



...

euh...??





CC0 SilviaP_Design https://pixabay.com/en/man-toon-club-stone-age-old-bart-2502243/

- Contribute and commit to the community
- Awareness is a first important step
- Software becomes more and more important
- We become more and more depended
- We should not preach only for the already converted
- But go out and evangelize





CCO Jo-B https://pixabay.com/en/jesuschristsheep-jesus-christ-2831127/

The OSGeo Eco system



GEOSPARC

The OSGeo Eco-system



GEOSPARC





Just one more thing ...





The future

The future is what **we** want! OSGeo is a **doacraty**

In Europe we should become more organised

If **you** want this to happen, You will have to **volunteer** to help



Thank you! Welcome to open geospatial

